



FIGURE 1

Amino acid sequence for full-length human wild type DPPIV [SEQ. ID No. 1]
(Residues 51-778-39-766 are underlined)

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[[----- --]]MKTPWKVL[[ ]]LG_LLGAALV[[ ]]TI_ITVPVLL[[ ]]NK
GTDDATAD[[ ]]SR KTYTLTDY[[ ]]LK NTYRLKLY[[ ]]SL 60
RWISDHEY[[ ]]LY KOENNILV[[ ]]FN AEYGNSSV[[ ]]FL ENSTFDEF[[ ]]GH
SINDYSIS[[ ]]PD GQFILLE[[ ]]NY 120
VKQWRHSY[[ ]]TA SYDIYDLN[[ ]]KR QLITEERI[[ ]]PN NTQWVTWS[[ ]]PV
GHKLAYVW[[ ]]NN DIYVKIEP[[ ]]NL 180
PSYRITWT[[ ]]GK EDIYNGI[[ ]]TD WVYEEVF[[ ]]SA YSALWWSP[[ ]]NG
TFLAYAQF[[ ]]ND TEVPLIEY[[ ]]SF 240
YSDESLOY[[ ]]PK TVRVYPK[[ ]]AG AVNPTVKF[[ ]]FV VNTDSLSS[[ ]]VT
NATSIQIT[[ ]]AP ASMLIGDH[[ ]]YL 300
CDVTWATQ[[ ]]ER ISLQWLRR[[ ]]IQ NYSVMDIC[[ ]]DY DESSGRWN[[ ]]CL
VARQHIEM[[ ]]ST TGWVGRFR[[ ]]PS 360
EPHFTLDG[[ ]]NS FYKIISNE[[ ]]EG YRHICYFQ[[ ]]ID KKDCTFIT[[ ]]KG
TWEVIGIE[[ ]]AL TSDYLYYI[[ ]]SN 420
EYKGMPGG[[ ]]RN LYKIQLSD[[ ]]YT KVTCLSCE[[ ]]LN PERCQYYS[[ ]]VS
FSKEAKYY[[ ]]QL RCGPGLP[[ ]]LY 480
TLHSSVND[[ ]]KG LRVLEDNS[[ ]]AL DKMLQNVQ[[ ]]MP SKKLDFII[[ ]]LN
ETKFWYQM[[ ]]IL PPHFDKSK[[ ]]KY 540
PLLLDVYA[[ ]]GP CSQADTV[[ ]]FR LNWATYLA[[ ]]ST ENIIVASF[[ ]]DG
RSGYQGD[[ ]]KI MHAINRRL[[ ]]GT 600
FEVEDQIE[[ ]]AA RQFSKMGF[[ ]]VD NKRIAIWG[[ ]]WS YGGYVTSM[[ ]]VL
GSGSGVFK[[ ]]CG IAVAPVSR[[ ]]WE 660
YYDSVYTE[[ ]]RY MGLPTPED[[ ]]NL DHYRNSTV[[ ]]MS RAENFKQV[[ ]]EY
LLIHGTAD[[ ]]DN VHFQQAQ[[ ]]IS 720
KALVDVGV[[ ]]DF QAMWYTDE[[ ]]DH GIASSTAH[[ ]]QH IYTHMSHF[[ ]]IK
QCFSLP 778776
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Amino acid sequence for residues 51-778-39-766 of DPPIV with a
N-terminal 6x-histidine tag [SEQ. ID No. 3]
(part of a gp67 signal sequence and a 6x-histidine tag is underlined)

```
ADPGGSHHHH HHSRKYTLT DYLKNTYRLK LYSRLWISDH EYLYKOENNI LVFNAEYGNS 60
SVFLENSTFD EFGHSINDYS ISPDGQFILL EYNYVKQWRH SYTASYDIYD LNKRLITEE 120
RIPNNTQWVT WSPVGHKLAY VWNNDIYVKI EPNLPSYRIT WTGKEDIYN GITDWVYEEE 180
VFSAYSALWW SPNGTFLAYA QFNDTEVPLI EYSFYDES L QYPKTVRVPY PKAGAVNPTV 240
KFFVVTDSL SSVTNATSIQ ITAPASMLIG DHYLCVDTWA TQERISLQWL RRIQNSVMD 300
ICDYDESSGR WNCLVARQHI EMSTTGWVGR FRPSEPHFTL DGNSFYKIIS NEEGYRHICY 360
FQIDKKDCTF ITKGTWEVIG IEALTSYLYI YISNEYKGMP GGRNLYKIQL SDYTKVTCLS 420
CELNPERCQY YSVSFSKEAK YYQLRCGSGP LPLYTLHSSV NDKGLRVLED NSALDKMLQN 480
VQMPSSKCLDF IILNETKFWY QMILPPHFDK SKKYPLLLDV YAGPCSQKAD TVFRLNWATY 540
LASTENIIVA SFDGRGSGYQ GDKIMHAINR RLGTFEVEDQ IEAARQFSKM GFVDNKRIAI 600
WGWSYGGYVT SMVLGSGSGV FKCGIAVAPV SRWEYDYSVY TERYMGLPTP EDNLDHYRNS 660
TVMSRAENFK QVEYLLIHGT ADDNVHFQQS AQISKALVDV GVDFQAMWYT DEDHGIASST 720
AHQHIYTHMS HFIKQCFSLP 740
```

FIGURE 1 (Cont.)

Human cDNA sequence encoding residues ~~51-778~~39-766 of DPPIV [SEQ. ID No. 2]

AGTCGCAAAA	CTTACACTCT	AACTGATTAC	TTAAAAAATA	CTTATAGACT	GAAGTTATAC	60
TCCTTAAGAT	GGATTTTCAGA	TCATGAATAT	CTCTACAAAC	AAGAAAAATA	TATCTTGGTA	120
TTCAATGCTG	AATATGGAAA	CAGCTCAGTT	TTCTTGGAGA	ACAGTACATT	TGATGAGTTT	180
GGACATTCTA	TCAATGATTA	TTCAATATCT	CCTGATGGGC	AGTTTATTCT	CTTAGAATAC	240
AACTACGTGA	AGCAATGGAG	GCATTCCCTAC	ACAGCTTCAT	ATGACATTTA	TGATTTAAAT	300
AAAAGGCAGC	TGATTACAGA	AGAGAGGATT	CCAAACAACA	CACAGTGGGT	CACATGGTCA	360
CCAGTGGGTC	ATAAATTGGC	ATATGTTTGG	AACAATGACA	TTTATGTTAA	AATTGAACCA	420
AATTTACCAA	GTTACAGAAT	CACATGGACG	GGGAAAGAAG	ATATAATATA	TAATGGAATA	480
ACTGACTGGG	TTTATGAAGA	GGAAGTCTTC	AGTGCCCTACT	CTGCTCTGTG	GTGGTCTCCA	540
AACGGCACTT	TTTTAGCATA	TGCCCAATTT	AACGACACAG	AAGTCCCACT	TATTGAATAC	600
TCCTTCTACT	CTGATGAGTC	ACTGCAGTAC	CCAAAGACTG	TACGGGTTCC	ATATCCAAAAG	660
GCAGGAGCTG	TGAATCCAAC	TGTAAAGTTC	TTTGTTGTAA	ATACAGACTC	TCTCAGCTCA	720
GTCACCAATG	CAACTTCCAT	ACAAATCACT	GCTCCTGCTT	CTATGTTGAT	AGGGGATCAC	780
TACTTGTGTG	ATGTGACATG	GGCAACACAA	GAAAGAATTT	CTTTGCAGTG	GCTCAGGAGG	840
ATTCAGAACT	ATTCGGTCAT	GGATATTTGT	GACTATGATG	AATCCAGTGG	AAGATGGAAC	900
TGCTTAGTGG	CACGGCAACA	CATTGAAATG	AGTACTACTG	GCTGGGTTGG	AAGATTTAGG	960
CCTTCAGAAC	CTCATTTTAC	CCTTGATGGT	AATAGCTTCT	ACAAGATCAT	CAGCAATGAA	1020
GAAGGTAC	GACACATTTG	CTATTTCCAA	ATAGATAAAA	AAGACTGCAC	ATTTATTACA	1080
AAAGGCACCT	GGGAAGTCAT	CGGGATAGAA	GCTCTAACCA	GTGATTATCT	ATACTACATT	1140
AGTAATGAAT	ATAAAGGAAT	GCCAGGAGGA	AGGAATCTTT	ATAAAATCCA	ACTTATTGAC	1200
TATACAAAAG	TGACATGCCT	CAGTTGTGAG	CTGAATCCGG	AAAGGTGTCA	GTACTATTCT	1260
GTGTCATTCA	GTAAAGAGGC	GAAGTATTAT	CAGCTGAGAT	GTTCCGGTCC	TGGTCTGCCC	1320
CTCTATACTC	TACACAGCAG	CGTGAATGAT	AAAGGGCTGA	GAGTCCTGGA	AGACAATTCA	1380
GCTTTGGATA	AAATGCTGCA	GAATGTCCAG	ATGCCCTCCA	AAAAACTGGA	CTTCATTATT	1440
TTGAATGAAA	CAAAATTTTG	GTATCAGATG	ATCTTGCTC	CTCATTTTGA	TAAATCCAAG	1500
AAATATCCTC	TACTATTAGA	TGTGTATGCA	GGCCCATGTA	GTCAAAAAGC	AGACACTGTC	1560
TTCAGACTGA	ACTGGGCCAC	TTACCTTGCA	AGCACAGAAA	ACATTATAGT	AGCTAGCTTT	1620
GATGGCAGAG	GAAGTGTTTA	CCAAGGAGAT	AAGATCATGC	ATGCAATCAA	CAGAAGACTG	1680
GGAACATTTG	AAGTTGAAGA	TCAAATTGAA	GCAGCCAGAC	AATTTTCAAA	AATGGGATTT	1740
GTGGACAACA	AACGAATTGC	AATTTGGGGC	TGGTCATATG	GAGGGTACGT	AACCTCAATG	1800
GTCTGGGAT	CGGGAAGTGG	CGTGTTCAAG	TGTGGAATAG	CCGTGGCGCC	TGTATCCCGG	1860
TGGGAGTACT	ATGACTCAGT	GTACACAGAA	CGTTACATGG	GTCTCCCAAC	TCCAGAAGAC	1920
AACCTTGACC	ATTACAGAAA	TTCAACAGTC	ATGAGCAGAG	CTGAAAATTT	TAAACAAGTT	1980
GAGTACCTCC	TTATTTCATGG	AACAGCAGAT	GATAACGTTT	ACTTTCAGCA	GTCAGCTCAG	2040
ATCTCCAAAG	CCCTGGTCTGA	TGTTGGAGTG	GATTTCCAGG	CAATGTGGTA	TACTGATGAA	2100
GACCATGGAA	TAGCTAGCAG	CACAGCACAC	CAACATATAT	ATACCCACAT	GAGCCACTTC	2160
ATAAAACAAT	GTTTCTCTTT	ACCT				2184

FIGURE 1

Amino acid sequence for full-length human wild type DPPIV [SEQ. ID No. 1]

(Residues 39-766 are underlined)

MKTPWKVLLG	LLGAAALVTI	ITVPVLLNK	GTDDATADSR	KTYTLTDYLK	NTYRLKLYSL	60
RWISDHEYLY	KQENNILVFN	AEYGNSSVFL	ENSTFDEFGH	SINDYSISPD	GQFILLEyny	120
VKQWRHSYTA	SYDIYDLNKR	QLITEERIPN	NTQVWTWSPV	GHKLAYVWNN	DIYVKIEPNL	180
PSYRITWTGK	EDIYNGITD	WVYEEVFSA	YSALWWSPNG	TFLAYAQFND	TEVPLIEYSF	240
YSDSLQYPK	TVRVYPYKAG	AVNPTVKFFV	VNTDSLSSVT	NATSIQITAP	ASMLIGDHYL	300
CDVTWATQER	ISLQWLRRIQ	NYSVMDICDY	DESSGRWNCL	VARQHIEMST	TGWVGRFRPS	360
EPHFTLDGNS	FYKIISNEEG	YRHICYFQID	KKDCTFITKG	TWEVIGIEAL	TSDYLYYISN	420
EYKGMPGGRN	LYKIQLSDYT	KVTCLSCELN	PERCQYYSVS	FSKEAKYYQL	RCSGPGGLPLY	480
TLHSSVNDKG	LRVLEDNSAL	DKMLQNVQMP	SKKLDFIILN	ETKFWYQMIL	PPHFDKSKKY	540
PLLLDVYAGP	CSQKADTVFR	LNWATYLAST	ENIIVASFDD	RSGGYQGDKI	MHAINRRLGT	600
FEVEDQIEAA	RQFSKMGFVD	NKRIAIWGS	YGGYVTSMVL	GSGSGVFKCG	IAPVPSRWE	660
YYDSVYTERY	MGLPTPEDNL	DHYRNSTVMS	RAENFKQVEY	LLIHGTADDN	VHFQQAQIS	720
KALVDVGVDF	QAMWYTDEDH	GIASSTAQH	IYTHMSHFIC	QCFSLP		766

Amino acid sequence for residues 39-766 of DPPIV with a

N-terminal 6x-histidine tag [SEQ. ID No. 3]

(part of a gp67 signal sequence and a 6x-histidine tag is underlined)

ADPGGSHHHH	HHSRKTYTLT	DYLNKTYRLK	LYSLRWISDH	EYLYKQENNI	LVFNAEYGN	60
SVFLENSTFD	EFGHSINDYS	ISPDGQFILL	EYNYVKQWRH	SYTASYDIYD	LNKRQLITEE	120
RIPNNTQWVT	WSPVGHKLAY	VWNNDIYVKI	EPNLPSYRIT	WTGKEDIYN	GITDWVYEEE	180
VFSAYSALWW	SPNGTFLAYA	QFNDTEVPLI	EYSFYSDSL	QYPKTVRVPY	PKAGAVNPTV	240
KFFVVNTDSL	SSVTNATSIQ	ITAPASMLIG	DHYLCDVTWA	TQERISLQWL	RRIQNYSVMD	300
ICDYDESSGR	WNCLVARQHI	EMSTTGWVGR	FRPSEPHFTL	DGNSFYKIIS	NEEGYRHICY	360
FQIDKKDCTF	ITKGTWEVIG	IEALTSDYLY	YISNEYKGMP	GGRNLYKIQL	SDYTKVTCLS	420
CELNPERCQY	YSVSFSKEAK	YYQLRCSGPG	LPLYTLHSSV	NDKGLRVLED	NSALDKMLQN	480
VQMPSKKLDF	IILNETKFWY	QMILPPHFDK	SKKYPLLLDV	YAGPCSQKAD	TVFRLNWATY	540
LASTENIIVA	SFDGRSGGYQ	GDKIMHAINR	RLGTFEVEDQ	IEAARQFSKM	GFVDNKRIAI	600
WGWSYGGYVT	SMVLGSGSGV	FKCGIAPV	SRWEYDVS	TERYMGLPT	EDNLDHYRNS	660
TVMSRAENFK	QVEYLLIHGT	ADDNVHFQQS	AQISKALVDV	GVDFQAMWYT	DEDHGIASST	720
AHQHIYTHMS	HFICQCFSLP					740

FIGURE 1 (Cont.)

Human cDNA sequence encoding residues 39-766 of DPPIV [SEQ. ID No. 2]

AGTCGCAAAA	CTTACACTCT	AACTGATTAC	TTAAAAAATA	CTTATAGACT	GAAGTTATAC	60
TCCTTAAGAT	GGATTTTCAGA	TCATGAATAT	CTCTACAAAC	AAGAAAAATA	TATCTTG GTA	120
TTCAATGCTG	AATATGGAAA	CAGCTCAGTT	TTCTTGAGAG	ACAGTACATT	TGATGAGTTT	180
GGACATTCTA	TCAATGATTA	TTCAATATCT	CCTGATGGGC	AGTTTATTCT	CTTAGAATAC	240
AACTACGTGA	AGCAATGGAG	GCATTCCCTAC	ACAGCTTCAT	ATGACATTTA	TGATTTAAAT	300
AAAAGGCAGC	TGATTACAGA	AGAGAGGATT	CCAAACAACA	CACAGTGGGT	CACATGGTCA	360
CCAGTGGGTC	ATAAATTGGC	ATATGTTTGG	AACAATGACA	TTTATGTTAA	AATTGAACCA	420
AATTTACCAA	GTTACAGAAT	CACATGGACG	GGGAAAGAAG	ATATAATATA	TAATGGAATA	480
ACTGACTGGG	TTTATGAAGA	GGAAGTCTTC	AGTGCCTACT	CTGCTCTGTG	GTGGTCTCCA	540
AACGGCACTT	TTTATGACATA	TGCCCCAATT	AACGACACAG	AAGTCCCACT	TATTGAATAC	600
TCCTTCTACT	CTGATGAGTC	ACTGCAGTAC	CCAAAGACTG	TACGGGTTCC	ATATCCAAAG	660
GCAGGAGCTG	TGAATCCAAC	TGTAAAGTTC	TTTGTGTGTA	ATACAGACTC	TCTCAGCTCA	720
GTCACCAATG	CAACTTCCAT	ACAAATCACT	GCTCCTGCTT	CTATGTTGAT	AGGGGATCAC	780
TACTTGTGTG	ATGTGACATG	GGCAACACAA	GAAAGAATTT	CTTTGCAGTG	GCTCAGGAGG	840
ATTCAGAACT	ATTCGGTCAT	GGATATTTGT	GACTATGATG	AATCCAGTGG	AAGATGGAAC	900
TGCTTAGTGG	CACGGCAACA	CATTGAAATG	AGTACTACTG	GCTGGGTTGG	AAGATTTAGG	960
CCTTCAGAAC	CTCATTTTAC	CCTTGATGGT	AATAGCTTCT	ACAAGATCAT	CAGCAATGAA	1020
GAAGGTTACA	GACACATTTG	CTATTTCCAA	ATAGATAAAA	AAGACTGCAC	ATTTATTACA	1080
AAAGGCACCT	GGGAAGTCAT	CGGGATAGAA	GCTCTAACCA	GTGATTATCT	ATACTACATT	1140
AGTAATGAAT	ATAAAGGAAT	GCCAGGAGGA	AGGAATCTTT	ATAAAATCCA	ACTTATTGAC	1200
TATACAAAAG	TGACATGCCT	CAGTTGTGAG	CTGAATCCGG	AAAGGTGTCA	GTACTATTCT	1260
GTGTCATTCA	GTAAAGAGGC	GAAGTATTAT	CAGCTGAGAT	GTTCCGGTCC	TGGTCTGCCC	1320
CTCTATACTC	TACACAGCAG	CGTGAATGAT	AAAGGGCTGA	GAGTCCTGGA	AGACAATTCA	1380
GCTTTGGATA	AAATGCTGCA	GAATGTCCAG	ATGCCCTCCA	AAAAACTGGA	CTTCATTATT	1440
TTGAATGAAA	CAAAATTTTG	GTATCAGATG	ATCTTGCCTC	CTCATTTTGA	TAAATCCAAG	1500
AAATATCCTC	TACTATTAGA	TGTGTATGCA	GGCCATGTA	GTCAAAAAGC	AGACACTGTC	1560
TTCAGACTGA	ACTGGGCCAC	TTACCTTGCA	AGCACAGAAA	ACATTATAGT	AGCTAGCTTT	1620
GATGGCAGAG	GAAGTGGTTA	CCAAGGAGAT	AAGATCATGC	ATGCAATCAA	CAGAAGACTG	1680
GGAACATTTG	AAGTTGAAGA	TCAAAATTGAA	GCAGCCAGAC	AATTTTCAAA	AATGGGATTT	1740
GTGGACAACA	AACGAATTGC	AATTTGGGGC	TGGTCATATG	GAGGGTACGT	AACCTCAATG	1800
GTCTTGGGAT	CGGGAAGTGG	CGTGTTC AAG	TGTGGAATAG	CCGTGGCGCC	TGTATCCCGG	1860
TGGGAGTACT	ATGACTCAGT	GTACACAGAA	CGTTACATGG	GTCTCCCAAC	TCCAGAAGAC	1920
AACCTTGACC	ATTACAGAAA	TTCAACAGTC	ATGAGCAGAG	CTGAAAATTT	TAAACAAGTT	1980
GAGTACCTCC	TTATTCATGG	AACAGCAGAT	GATAACGTTT	ACTTTCAGCA	GTCAGCTCAG	2040
ATCTCCAAAG	CCCTGGTCCA	TGTTGGAGTG	GATTTCCAGG	CAATGTGGTA	TACTGATGAA	2100
GACCATGGAA	TAGCTAGCAG	CACAGCACAC	CAACATATAT	ATACCCACAT	GAGCCACTTC	2160
ATAAAACAAT	GTTTCTCTTT	ACCT				2184